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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,046	01/11/2002	John Addink	100302.0016US1	8668
34284	7590	04/02/2004	EXAMINER	
ROBERT D. FISH; RUTAN & TUCKER, LLP P.O. BOX 1950 611 ANTON BLVD., 14TH FLOOR COSTA MESA, CA 92628-1950			RODRIGUEZ, PAUL L	
			ART UNIT	PAPER NUMBER
			2125	
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18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/031,046	ADDINK ET AL.
	Examiner Paul L Rodriguez	Art Unit 2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5,7,8,10-19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,7,8,10-19 and 21-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. The preliminary amendment filed 2/27/04 has been received and considered. Claims 1-5, 7, 8, 10-19 and 21-26 are presented for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/27/04 has been entered.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. See previous office actions and pages 2-3 of the instant applications specification.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "32" has been used to designate both "user location" and "pressure sensor".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. The drawing submitted 9/25/03, in order to overcome the drawing objections presented in the office action of 6/23/03 introduced the above objection. Applicant did not address this objection in the amendment filed with the request for continued examination therefore the objection remains.

Claim Objections

5. Claims 4, 10, 11, 19 and 21 are objected to because of the following informalities:

Claim 4 line 2 refers to “a second unit”, there was no previous claim of a “first” unit.

Could create confusion or an antecedent problem in the claims.

Claim 10 ends with a “;.” as amended.

Claim 11 lines 4-5 refers to “a second communication system”, there was no previous “first” communication system, just “a communication system”. Could create confusion or an antecedent problem in the claims.

Claim 19 line 2 refers to “a third communication system”, claim 19 depends from claim 10, claim 10 recites “a communication system”, there was no previous “first” or “second” communication system claimed.

Claim 21 line 2 refers to “a second communication system”, there was no previous “first” communication system, just “a communication system”. Could create confusion or an antecedent problem in the claims.

Appropriate correction is required.

6. The examiner has provided a number of examples of the claim deficiencies in the above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the claim objections.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 17 recites the limitation "the desired quantity" in line 2. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 18 recites the limitation "the water usage data" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-5, 10, 12-15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Collins (U.S. Pat 6,402,048). The claimed invention reads on Collins as follows.

Collins discloses (claim 1) an irrigation system (figure 1) comprising each of an irrigation controller (reference number 100) and a water application device (reference number 102) physically situated at a location of a user (figure 5, col. 9 line 64 – col. 10 line 42), the controller at least partially controlling the water application device (col. 10 lines 1-60), a communication system that exchanges information between the irrigation controller and a government agency wherein the communication system comprises a public, packet switched network (col. 20 lines 34-58), (claim 2) wherein the exchange of information between the irrigation controller and the government agency is bi-directional (Internet is inherently bi-directional, col. 20 lines 51-58), (claim 3) further comprising a microprocessor (reference number 170, 214) disposed in the irrigation controller, that facilitates the exchange of information between the irrigation controller and the government agency (col. 20 lines 51-58), (claim 4) further comprising a microprocessor disposed in a second unit separate from the irrigation controller, that facilitates the exchange of information between the irrigation controller and the government agency (col. 20 lines 51-58, Inherent, information transferred to the irrigation controller via the Internet, a second unit at the government agency would require an Internet capable device, which are known to comprise a microprocessor), (claim 5) further comprising a storage device that stores data at the user location (reference number 172, 174), (claim 10) a method of operating an irrigation system

(abstract) comprising physically situating each of an irrigation controller (reference number 100) and a water application device (reference number 102) at a location of a user (figure 5, col. 9 line 64 – col. 10 line 42), utilizing the controller to at least partially control the water application device (col. 10 lines 1-60), providing a communication system comprising a public, packet switched network (col. 20 lines 34-58) and coupling the irrigation controller and a government agency using the communication system (col. 20 lines 51-58), (claim 12) further comprising providing the controller with a microprocessor programmed to receive additional information from a distal computer via the communication system (col. 20 lines 34-58), and the microprocessor determining an irrigation schedule based at least in part on landscape irrigation operating information from the user and the additional information from the distal computer (col. 14 lines 25-50), (claim 13) further comprising: providing the controller with local water usage data; and the microprocessor determining an irrigation schedule based at least in part on the water usage data (col. 19 line 9 – col. 20 line 32 and claim 16), (claim 14) wherein the step of determining an irrigation schedule further includes the microprocessor computing a desired quantity of water to be applied to a landscape at the user's location for a specific period of time (col. 29 line 53 – col. 30 line 54, claim 16), (claim 15) wherein the period of time is at least one day (col. 12 line 46-64, col. 24 lines 38-44), (claim 18) wherein the water usage data includes water pressure data (col. 13 lines 6-13) and (claim 19) further comprising coupling the user and a distal computer using a third communication system (col. 10 lines 7-11). Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 7, 8, 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Peek et al (U.S. Pat 6,343,255).

Collins teaches most all of the instant invention as applied to claim 1 above and also teaches the user entering landscape irrigation operating information and transmitting the information to the irrigation controller via a second communication system (col. 10 lines 23-33, col. 21 line 11 – col. 24 line 54, remote programming via 110).

Collins fails to teach wherein the communication system comprises a two-way pager, wherein the communication system comprises a web page interface, entering landscape irrigation

operating information into a personal computer and the personal computer transmitting the information to the irrigation controller via a second communication system and sending information from a distal computer to the government agency, such information including irrigation operating information.

Peek et al teaches (claim 7) wherein the first communication system comprises a two-way pager (col. 8 lines 49-58, known pager functions), (claim 8) wherein the first communication system comprises a web page interface (col. 7 lines 47-50, figure 8, provide Internet interfaces for displaying data, considered a web page), (claim 11) entering the landscape irrigation operating information into a personal computer and the personal computer transmitting the information to the irrigation controller via the second communication system (col. 4 lines 9--14, col. 7 lines 4-13), and (claim 25) sending information from the distal computer to the government agency, such information including irrigation operating information (col. 6 lines 27-46, because of the various modes of communication, especially the Internet, information being sent to any destination would be obvious).¹

Collins and Peek et al are analogous art because they are both related to a system and method of performing irrigation control.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the communications of Peek et al in the irrigation controller of Collins because Peek et al teaches an irrigation system that can provide accurate microclimate information from a plurality of weather stations, can receive notification if weather conditions could cause damage to crops, and receives customized information that reflects the particular crop, field configurations and weather conditions, that will assist the user with proper application

Art Unit: 2125

of irrigation to crops, which would increase crop production and minimize crop losses (col. 3 line 58 – col. 4 lines 32).

15. Claims 16, 17 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Miller (U.S. Pat 5,479,339).

Collins teaches most all of the instant invention as applied to claim 1 above. Collins fails to teach wherein the additional information from the distal computer includes weather data, and further comprising the microprocessor computing an ETo value, the microprocessor comparing the ETo value to the desired quantity of water applied to the landscape, a microprocessor sending a warning to the user via a second communication system when an aspect of the irrigation system falls outside of a predetermined parameter, a microprocessor preventing an operation of the irrigation system when the irrigation system falls outside of the predetermined parameters and transmitting information to a distal computer such information comprising a calculated estimate of water actually applied at a station for a time period.

Miller teaches (claim 16) wherein the additional information from the distal computer includes weather data (col. 5 line 67 – col. 6 line 6) and further comprising the microprocessor computing an ETo value (col. 6 line 59 – col. 8 line 47), (claim 17) the microprocessor comparing the ETo value to the desired quantity of water applied to the landscape (col. 10 line 55 – col. 11 line 55), (claim 21) the microprocessor sending a warning to the user via a second communication system when an aspect of the irrigation system falls outside of a predetermined parameter (abstract, col. 3 lines 19-26, col. 6 lines 41-58), (claim 22) a microprocessor preventing an operation of the irrigation system when the irrigation system falls outside of the predetermined parameters (col. 6 lines 46-58, col. 10 lines 27-46) and (claim 23) transmitting

information to a distal computer such information comprising a calculated estimate of water actually applied at a station for a time period (col. 11 lines 25-28).

Collins and Miller are analogous art because they are both related to a system and method of performing irrigation control.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the information, water quantities, warnings, parameters and calculations of Miller in the irrigation controller of Collins because Miller teaches a system and method for central and local cooperative control and management of irrigation by using weather data to stay within predetermined water budget restrictions (col. 2 lines 54-59) and the system provides a way of balancing projected water usage against water conservation requirements (col. 6 line 31-58).

16. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Miller (U.S. Pat 5,479,339) as applied to claims 10 and 23 above, and further in view of Peek et al (U.S. Pat 6,343,255).

Collins as modified by Miller teaches an irrigation controller with remote communications as recited in claims 10 and 23 above, differing from the invention as recited in claim 24 in that their combined teaching lacks wherein the information transmitted to the distal computer further includes a relationship between the calculated estimate of water actually applied at a station for a time period, and a computed ET₀ for the station for the time period.

Peek et al teaches wherein the information transmitted to the distal computer further includes a relationship between the calculated estimate of water actually applied at a station for a time period, and a computed ETo for the station for the time period (col. 8 lines 9-48).

Collins as modified by Miller and Peek et al are analogous art because they are both related to irrigation controllers.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the calculations of Peek et al in the irrigation controller of Collins as modified by Miller because Peek et al teaches an irrigation system that can provide accurate microclimate information from a plurality of weather stations, can receive notification if weather conditions could cause damage to crops, and receives customized information that reflects the particular crop, field configurations and weather conditions, that will assist the user with proper application of irrigation to crops, which would increase crop production and minimize crop losses (col. 3 line 58 – col. 4 lines 32).

17. Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Peek et al (U.S. Pat 6,343,255) as applied to claims 10 and 25 above, and further in view of Miller (U.S. Pat 5,479,339).

Collins as modified by Peek et al teaches an irrigation controller with remote communications as recited in claims 10 and 25 above, differing from the invention as recited in claim 24 in that their combined teaching lacks wherein the irrigation operating information includes at least one of an irrigation start time, an irrigation run time, an irrigation water flow value, and an irrigation water pressure value.

Miller teaches wherein the irrigation operating information includes at least one of an irrigation start time, and irrigation run time, an irrigation water flow value, and an irrigation water pressure value (col. 3 lines 35-40, col. 5 line 41 – col. 5 line 6).

Collins as modified by Peek et al and Miller are analogous art because they are both related to irrigation controllers.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the operating information of miller in the irrigation controller of Collins as modified by Peek et al because Miller teaches a system and method for central and local cooperative control and management of irrigation by using weather data to stay within predetermined water budget restrictions (col. 2 lines 54-59) and the system provides a way of balancing projected water usage against water conservation requirements (col. 6 line 31-58).

Response to Arguments

18. Applicant's arguments with respect to claims 1-5, 7, 8, 10-19 and 21-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oliver (U.S. Pat 5,870,302) – teaches government managed weather stations that provide information to the controller system.

Marian (U.S. Pat 5,208,855) – teaches an irrigation controller that communicates with government agencies that provide information via a computer and a database.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul L Rodriguez whose telephone number is (703) 305-7399. The examiner can normally be reached on 6:00 - 4:30 T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul L Rodriguez
Examiner
Art Unit 2125